

**SOUTHERLY RANGE EXTENSION FOR COMMON ROCK-RAT *ZYDOMYS ARGURUS* (RODENTIA: MURIDAE) IN QUEENSLAND.** *Memoirs of the Queensland Museum* 48(1): 154. 2002:- The Common Rock-rat (*Zydomys argurus* Thomas, 1889) is a small to medium-sized rodent up to 55g; it is almost always associated with rocky outcrops (Fleming, 1995); it is endemic to N Australia (WA, NT, QLD); in QLD it occurs in rocky ranges and outcrops between Lagoon Creek Gorge, (17°33'S, 138°01'E) and Cape Melville, (14°22'S, 144°37'E) to Lark Quarry, (23°01'S, 142°24'E) and Blackdown Tableland, (23°44'40"S, 149°06'20"E) (Kitchener, 1989; QM data).

In May 2000 a trapping survey for Northern Quoll (Oakwood & Firestone, 2000), in the Mount Moffatt Section of Carnarvon NP, 600km NW of Brisbane used wire cage, and Type A and Type B Elliott traps set at 7 sites (454 trap nights) on or near rocky outcrops. Traps were baited with a holus of rolled oats and peanut butter, or salami laced with pistachio essence. *D. hallucatus*, Fawn-footed Melomys *Melomys cervinipes*, Long-nosed Bandicoot *Perameles nasuta*, *Pseudomys* sp. and *Z. argurus* were caught.

This new record for *Z. argurus* was caught at The Duchess (25°06'11.6"S, 147°51'06.6"E), a distinctive outcrop of Precipice Sandstone overlooking the Maranoa River and rising above the surrounding sandplain to an altitude of 740m. Two *D. hallucatus* and one unidentified rodent were also caught at this site (116 trap nights). *Z. argurus* was captured on 30 May 2000 in a collapsible wire cage trap (55.5x20x20cm), baited with peanut butter and rolled oats. The trap was set at the entrance of a cave in the vertical rock-face, on a broad ledge just below the summit. The cave faces SW, is up to 2.0m high, 1.55m wide and 13.8m long. No evidence of *Z. argurus*, such as scats or chewed seeds and fruit, was observed in the vicinity of the trap site.

Vegetation in the trap site is scattered *Angophora leiocarpa* and *Eucalyptus decorticans*, with a mid-layer dominated by *Leptospermum lamellatum*, *Acacia* spp., *Callitris endlicheri* and low shrubs. The ground layer is dominated by *Lomandra* sp., while other graminoids and forbs are sparse. Dense leaf litter covers the ground. Areas of vertical rock-face are dominated by *L. lamellatum*, *Wahlenbergia islensis*, and bryophytes. The area equates to regional ecosystem 11.10.4 'complex of *Eucalyptus decorticans* and/or *Acacia shirleyi* woodland/open forest and mixed woodland/open forest on Cainozoic to Proterozoic consolidated, medium to coarse grained sediments' (Young et al., 1999). This habitat type is extensive in Mount Moffatt, Moolayember, Salvator Rosa and Goodliffe Sections of Carnarvon National Park, and is broadly consistent with habitat records for *Z. argurus* in other parts of Queensland.

*Z. argurus* was extremely active in the trap when first approached and the tip of the tail was discarded when the animal was first handled. The voucher specimen, lodged in the Queensland Museum (QMJM 14298), is a juvenile male, with SVL ~85mm and tail length ~87mm. Its body has brownish-grey fur above, buff on the sides and cream below. The tail is distinctly bicoloured (dark grey above, light grey below) and slightly, but noticeably swollen near the base, clearly ringed (as opposed to mosaic) and well furred. The nose is pink, ears dark grey and feet dark grey, furred white above. The specimen was distinguished from the other 8 eight species of rodent that occur at Mount Moffatt by a

combination of body size, SVL/tail length ratio, un-notched upper incisors, strongly bi-coloured well furred tail which is swollen at the base, and pronounced roman-nose.

The southern limit for *Z. argurus* was Blackdown Tableland (23°44'40"S, 149°06'20"E) where it was trapped between Peregrine and Horseshoe Lookouts, Sept. 1984 (C. James, G. Porter pers. comm.). This record in the Carnarvon Range represents a range extension of 200km. The climate of Carnarvon Range is subhumid, with mean annual rainfall of >800mm (Galloway et al., 1974). The vertebrate fauna is predominantly Bassian whereas *Z. argurus* is one of a small subset (7 spp.) of Torresian species.

*Zydomys argurus* is regarded as secure at a national level (Lee, 1995), and common in Queensland (Dickman et al., 2000).

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